CHAPTER Puc 1800 ADMINISTRATION OF NEW HAMPSHIRE CODE FOR ENERGY CONSERVATION IN NEW BUILDING CONSTRUCTION

PART Puc 1801 DEFINITIONS

Readopt with amendment Puc 1801.01 – 1801.02, effective 2-2-7 (Document # 8811) to read as follows:

Puc 1801.01 "Applicant" means the general contractor, builder, owner or other person submitting an application to the commission or local building code official, as applicable, for ~~approval regarding~~ certification of design compliance with the energy code.

Puc 1801.02 "Application" means application (EC-1) forms, ~~the~~ plans and specifications, compliance materials, ~~cover letter~~ and any additional material submitted to the commission or local building code official, as applicable, for review for compliance with the energy code.

Repeal Puc 1801.03, effective 2-2-7 (Document # 8811):

~~Puc 1801.03 "ASHRAE 90.1" means the American Society of Heating, Refrigerating and Air-conditioning Engineers, Inc./Illuminating Engineering Society of North America (ASHRAE/IES) 90.1-1989 standard for construction titled, "Energy Efficient Design of New Buildings Except Low-Rise Residential Buildings".~~

Readopt with amendment and renumber Puc 1801.03 – 1801.10, effective 2-2-7 (Document # 8811) to read as follows:

Puc 1801.03 ~~4~~ "Certificate of compliance" means the document issued by the commission certifying approval of an application pursuant to RSA 155-D:4 IV or V.

Puc 1801.04 ~~5~~ "Commission" means the New Hampshire public utilities commission.

Puc 1801.05 ~~6~~ "Energy code" means the ~~"New Hampshire Code for Energy Conservation in New Building Construction"~~ applicable parts of the state building code as defined in RSA 155- A:~~ as referred to in RSA 155-D:2, II, which is Puc 1800~~1, IV and referenced in RSA 155-D:2, II.

Puc 1801.06 ~~7~~ "~~MEC Check®~~" "RES*check*" means the computer software program and paper forms designed to allow an applicant to calculate and demonstrate compliance of a structure with the ~~Model Energy Code~~ energy code.

~~Puc 1801.08 "Model Energy Code (MEC)" means the "Model Energy Code", 1995 edition, issued by the Council of American Building Officials, 5203 Leesburg Pike, Falls Church, Virginia 22041.~~

Puc 1801.07 ~~8 9~~ "Non-residential building" means any building or structure which is not a residential building.

Puc 1801.08 ~~9 10~~ "Residential building," as referenced in RSA 155-D:3, II, means:

(a) Any detached one or 2 family dwelling;

(b) Any other dwelling~~,~~ three stories or less in height; and

(c) Any other structure 3 stories or less in height and less than 4,000 square feet in gross floor area.

PART Puc 1802 APPLICATION OF RULES

Readopt with amendment Puc 1802.01 – 1802.02, effective 2-2-7 (Document # 8811) to read as follows:

Puc 1802.01 Application of Rules. ~~(a)~~ All new buildings and structures or portions thereof and additions or alterations to existing buildings that provide facilities or shelter for public assembly, educational, business, mercantile, institutional, storage and residential occupancy, as well as those portions of factory and industrial occupancies designed primarily for human occupancy within New Hampshire shall, except as provided in Puc 1802.02 , comply with the minimum design and construction requirements, as set forth in the ~~Model Energy Code~~ energy code.

Puc 1802.02 ~~Exemptions from and Amendments to MEC 95 and~~ Exemptions and Additional Requirements.

~~(a) The following amendments shall apply to the Model Energy Code adopted in Puc 1802.01:~~

~~(1) Buildings and structures or portions thereof which are exempt pursuant to RSA 155-D:7,I, II and/or III shall be exempt from the MEC;~~

~~(2) Residential buildings, defined in Puc 1801.10, shall conform to the A-1 standards as provided in the MEC;~~

~~(3) A historic building, which is exempt from the energy code pursuant to RSA 155-D:7, IV and/or exempt from the MEC pursuant to the MEC § 101.4.3.2, shall be exempt from the MEC;~~

~~(4) Greenhouses that are free-standing, or attached to a building and separated by a wall having the same thermal value as an exterior wall, and provided with a separate temperature control system shall be exempt from the MEC;~~

~~(5) Buildings or additions with less than 150 square feet of gross floor area shall be exempt from the MEC;~~

~~(6) Additions shall be exempt, that are:~~

~~(a) Separated from the occupied area of the building by a wall having the same thermal value as an exterior wall; and~~

~~(b) Either:~~

~~1. Are provided with a separate temperature control system; or~~

~~2. Are not heated or cooled by fossil fuel or electrically derived heat.~~

~~(7) Additions to buildings shall be exempt as to glazing percentage limitations of the MEC, if:~~

~~(a) Insulated to a minimum of R-30 in any opaque ceiling area;~~

~~(b) Insulated to a minimum of R-19 in any opaque wall area;~~

~~(c) Insulated to a minimum of R-30 in any floor area;~~

~~(d) Insulated to a minimum of R-19 in crawlspace walls or R-10 in a slab foundation; and~~

~~(e) Double glazed;~~

~~(8) The requirements for duck work insulation contained in MEC § 503 shall be modified to require a minimum insulation factor of r-3, pursuant to RSA 155-D:3, I (c);~~

~~(9) The requirements of ASHRAE 90.1, referred to in chapter 8 of the MEC and adopted in Puc 1802.01, which are applicable to non-residential buildings and structures, or portions thereof, and additions to existing non-residential buildings, shall be modified as provided by Puc 1806;~~

~~(10) The inspection provision requirements contained in MEC § 105.2, 105.3 and 105.4 shall not apply;~~

~~(11) MEC § 104.1 shall be amended to read in its entirety as follows:~~

~~"Specifications and plans or drawings shall be submitted with each application for energy code approval.";~~

~~(12) The definitions of residential and non-residential buildings contained in § 201.1 of the MEC are amended to the definitions of residential and non-residential buildings contained in Puc 1801.10 and Puc 1801.09, respectively; and~~

~~(13) The exterior design conditions attributable to residential construction described in chapter 3, § 302, of the MEC shall be those attributable to Concord, New Hampshire.~~

(a) A change in occupancy or use of an existing building which would require an increase in demand for either fossil fuel or electrical energy supply to heat or cool the structure shall, pursuant to RSA 155-D:8, comply with the requirements of the energy code.

(b) Mobile homes and other structures which are subject to Title VI, the National Manufactured Home Construction and Safety Standards Act of 1974, 42 U.S.C §§ 5401 through 5426, shall be exempt from Puc 1800.

~~(d) Nothing contained in (a)(10) above shall be construed as precluding towns and cities from enforcing provisions of Puc 1800 and/or inspecting buildings, pursuant to RSA 155-D:4,I or otherwise.~~

PART Puc 1803 METHODS OF COMPLIANCE REGARDING DESIGN

Readopt with amendment Puc 1803.01 – 1803.02, effective 2-2-7 (Document # 8811) to read as follows:

Puc 1803.01 Design Approval Required.

(a) No building design shall be considered approved pursuant to Puc 1800 and RSA 155-D without the issuance of ~~a certificate of compliance and~~ an approval number by the commission, except as provided in (b) and (c) below.

(b) A building design ~~which~~ that a local building official has approved in writing pursuant to RSA 155-D:4, II shall be deemed approved pursuant to (a) above.

(c) Pursuant to RSA 155-D:5, II, a building design shall be deemed approved for which:

(1) Plans have been certified as complying with the energy code by an architect or engineer pursuant to RSA 155-D:4, VI; or

(2) Plans have been deemed to be approved due to failure of the commission to act on a completed application within 15 working days of submittal pursuant to RSA 155-D:4, V.

Puc 1803.02 Demonstrating Compliance with the Design Requirements of Puc 1800.

(a) An applicant shall demonstrate that ~~each~~ any building to be constructed and subject to the requirements of 1802.01 meets or exceeds the minimum construction standards of the ~~MEC, as modified by Puc 1800~~ energy code, by one of the following methods:

(1) As to a residential building:

a. By showing compliance on an ~~paper~~ application ~~as provided with MEC Check®~~;

b. By showing compliance by entering construction ~~standards~~ design data in the computer software program, RES*check* ~~MEC Check®~~, or a New Hampshire version of RES*check* ~~MEC Check®, pursuant to Puc 1803.03~~;

c. By a certification issued by an architect or engineer, pursuant to Puc 1803.04;

d. A manufactured or prefabricated structure, except a mobile home, transported over state lines for erection in New Hampshire, only, shall be certified by the manufacturer as meeting the requirements of the ~~MEC, as modified by Puc 1800~~ energy code, or a nationally recognized equivalent of the ~~MEC~~ energy code, pursuant to RSA 155-D:4, VIII; or

e. By showing a standard design approval, pursuant to Puc 1803.05; or

(2) As to a non-residential building:

a. By a certification issued by an architect or engineer, pursuant to Puc 1803.04;

b. By showing compliance by entering constructions standards data in a computer software program, such as Com Check EZ®, Com Check Plus® or their equivalent, recognized by the American Society of Heating, Refrigerating and Air-conditioning Engineers, Inc./Illuminating Engineering Society of North America (ASHRAE/IES) or the commission to show compliance with the applicable portions of the energy code ~~ASHRAE 90.1~~;

c. By showing compliance on an ~~paper~~ application developed by the commission ~~as provided with MEC Check®~~;

d. By showing a standard design approval, pursuant to Puc 1803.05; or

e. A manufactured or prefabricated structure, except a mobile home, transported over state lines for erection in New Hampshire, only, shall be certified by the manufacturer as meeting the requirements of the ~~MEC~~ energy code, as modified by Puc 1800, or a nationally recognized equivalent of the ~~MEC~~ energy code, pursuant to RSA 155-D:4, VIII;

Repeal Puc 1803.03, effective 2-2-7 (Document # 8811):

~~Puc 1803.03 Demonstrating Compliance by MEC Check®.~~

~~(a) An applicant shall demonstrate compliance of a residential building by MEC Check®, as follows:~~

~~(1) By a MEC Check® compliance verification method, as follows:~~

~~a. Residential building design by MEC Check® prescriptive package worksheets in which the U-values and R-values are given for the thermal envelope;~~

~~b. Residential building design by MEC Check® component performance worksheets, also called the trade-off method, which allows trade-offs between building envelope components and heating and cooling equipment efficiencies to minimize costs; or~~

~~c. Residential building design by MEC Check® computer software print out or electronic transmission, which achieves similar results to the manual trade-off approach; and~~

~~(2) By a completed MEC Check® basic requirements checklist.~~

Readopt and renumber Puc 1803.04 – 1803.05, effective 2-2-7 (Document # 8811) as Puc 1803.03 and Puc 1803.04 to read as follows:

Puc 1803.0~~3~~ ~~4~~ Architect's or Engineer's Certification.

(a) Pursuant to RSA 155-D:4, VI, and VII, all architects or engineers registered and practicing in New Hampshire shall certify in writing to the commission and to the local building official in whose jurisdiction the building is located, that any building or structure which they design and that any blueprint to which they affix their professional seal, meets or exceeds the requirements of the energy code.

(b) Any architect or engineer issuing certification pursuant to RSA 155-D:4, VI, and VII shall provide, in writing, to the commission and to the local building official, the following:

(1) The name, address, signature and telephone number of the certifying architect or engineer;

(2) The registration stamp and registration number of the certifying architect or engineer;

(3) The tax map and lot number, and the county, town and street location of the project;

(4) The name, address and telephone number of the project owner;

(5) The name, address and telephone number of the general contractor if known at the time of certification; and

(6) A certification statement as follows:

"The proposed structure has been designed and reviewed by the architect or engineer and determined to be in compliance with all applicable requirements of RSA 155-D and the energy code adopted pursuant thereto."

(c) Any architect or engineer providing the certification described in this section shall be registered and practicing in the state of New Hampshire.

(d) An architect or engineer shall be deemed to be "practicing in New Hampshire," referred to in (c) above, if he or she has a working knowledge of all relevant New Hampshire building codes and the energy code, for the purpose of designing a structure in compliance with the energy code.

Puc 1803.04 ~~5.~~ Standard Design.

(a) If an applicant has previously received a certificate of compliance for an identically designed structure and the energy code requirements applicable to the structure have not been revised or amended since the issuance of the certificate of compliance, the applicant may:

(1) Provide the prior approval number;

(2) Complete, sign and date the application;

(3) Omit from the application materials architectural drawings and proof of compliance; and

(4) Submit the material described in (1) through (3) above as a completed application.

(b) The standard design method of demonstrating energy code compliance, as specified in (a) above, may be used with residential and non-residential buildings.

(c) Plans which have been deemed to be automatically approved due to failure of the commission to act on a completed application within 15 working days of submittal, pursuant to RSA 155-D:4, V, shall not be deemed to be previously approved plans, for purposes of this section.

Readopt with amendment and renumber Puc 1803.06, effective 2-2-7 (Document # 8811) to read as follows:

Puc 1803.05 ~~6~~ Certificate of Compliance with the Design Requirements of Puc 1800.

(a) The commission shall issue to the applicant a certificate of compliance, pursuant to RSA 155-D:4, IV, with the design requirements of ~~Puc 1800~~ the energy code if:

(1) The commission determines that the applicant has demonstrated, pursuant to Puc 1803, that the design of the building complies with the energy code; or

(2) The commission, pursuant to RSA 155-D:4,V, has failed to act on a completed application within 15 working days of submission of the completed application.

(b) The applicant shall, prior to obtaining a building permit, submit the certificate of compliance issued by the commission to the appropriate local building official responsible for the issuance of building permits, as evidence of compliance with the design requirements of Puc 1800.

PART Puc 1804 APPLICATION PROCESS

Readopt with amendment Puc 1804.01, effective 2-2-7 (Document # 8811) to read as follows:

Puc 1804.01 Content of Applications.

(a) Each applicant shall show in sufficient detail in the application documents, pertinent data and features of the building project and the equipment and systems as may be required to demonstrate compliance with ~~governed by Puc 1800~~ the energy code, including but not limited to, the following:

(1) Design criteria;

(2) Exterior envelope component materials;

(3) U-values of the envelope systems;

(4) R-values of insulating materials;

(5) Size and type of apparatus and equipment;

(6) Equipment and systems controls;

(7) Energy calculations, if applicable; and

(8) Other pertinent data to indicate conformance with the requirements of the energy code and Puc 1800.

(b) Each applicant shall include with each application for review of a building for compliance with the energy code, the following:

(1) An EC-1 application form; and

(2) Architectural drawings of the building if required to demonstrate compliance with the energy code; and ~~.~~

(3) A printout of the results of the RES*check* computer software if required to demonstrate compliance with the energy code.

(c) On the EC-1 application form required by (b)(1) above, the applicant shall provide the following:

(1) The applicant's name;

(2) The applicant's title and professional certification relative to the project, such as owner, builder, general contractor, architect or engineer, if any;

(3) The name of the applicant's business relative to the project, if any;

(4) The applicant's complete address and telephone number;

(5) As to the owner of the structure the subject of the application, his/her;

a. Name;

b. Complete address; and

c. Telephone number;

(6) A complete description of the location of the subject building including its tax map and lot number, its street address, and the town or city and county wherein located;

(7) A certification by the applicant, as follows:

"I hereby certify that all the information contained in this application is true and correct, and construction shall comply in all respects with the terms and specifications of the approval given by the Public Utilities Commission and with the New Hampshire Code for Energy Conservation in New Building Construction.";

(8) The signature of the applicant; and

(9) The date of the signature.

(d) In the architectural drawings of the building required by (b)(2) above, the applicant shall:

(1) Show the exterior dimensions of all heated living spaces;

(2) Show all window and exterior door locations;

(3) Label alphabetically all window and door locations on the floor plan to coincide with the list of windows and doors required by (d)(8) below;

(4) Show all floor plan perimeter dimensions;

(5) Show the finished wall height for each heated floor in the structure;

(6) Provide elevation drawings for any floors where there are cathedral, roof deck or sloping ceilings;

(7) Provide elevation drawings which identify:

a. The dimensions of the flat ceiling area;

b. The length of slope;

c. The height of any knee walls;

d. The height of any full height walls;

e. The distance from the knee wall to the exterior wall;

f. The distance from the knee wall to the opposite wall; and

g. The dimensions of dormer walls and skylight shafts.

(8) Provide a list of windows and doors which:

a. Identifies each window and door alphabetically;

b. States the U or R-value of each window size, glazed door and door glazing area;

c. Lists the quantity of each window size;

d. Identifies the roughed-out dimensions of each window in decimals of a foot or inches or any combination thereof; and

e. Provides the total square foot area of all rough openings for each window size; and

f. Provides the total square foot rough-opening dimensions of all windows and all glazed doors and sliders.

(e) In the window and door schedules required by (d) (8) above, applicants shall meet the following requirements:

(1) Descriptions of doors which have less than 50 percent glazing area shall include under the glazing totals only the glass area in those doors;

(2) The entire rough opening dimension of the solid area of the door shall be listed separately;

(3) The U or R-values for each different type of window and door shall also be listed on the window and door schedule;

(4) Basement windows shall be separately listed on the schedule; and

(5) Basement windows shall be included in the glazing total only when foundation walls enclose heated living space.

(f) The architectural drawings required by (b)(2) above shall meet the following requirements:

(1) The drawings shall, in addition to meeting the specific requirements of this section, provide, pursuant to (a) above, any additional information necessary to allow determination of compliance with RSA 155-D and Puc 1800;

(2) The maximum size of any prints submitted shall be 18 inches by 24 inches, if possible; and

(3) Each drawing shall contain a scale of the drawings shown in feet and inches.

Readopt with amendment and renumber Puc 1804.02 – 1804.03, effective 2-2-7 (Document # 8811) to read as follows:

Puc 1804.02 Procedure Relating to Applications.

(a) Applicants may submit applications to the commission in any of the following forms:

(1) In paper form; or

(2) In electronic form, using RES*check* ~~MEC Check®~~, as follows:

a. On computer disk; or

b. By electronic mail.

(b) Any application submitted electronically shall not be deemed received, for purposes of the response within 15 working days deadline of RSA 155-D:4, V, until the applicant submits a paper copy of the application containing an original signature of the applicant or a signature is confirmed by a unique ~~electronic~~ identifier ~~mechanism~~. The application materials shall not be completed in pencil or by any other non-permanent marking method.

~~(c) When an applicant submits plans and specifications to the commission for review pursuant to RSA 155-D, it shall comply with the following:~~

~~(1) Applications shall include one original and 2 copies of all material submitted; and~~

~~(2) The application materials shall not be completed in pencil or by any other non-permanent marking method.~~

(c ~~d~~) If an applicant makes a substantive revision to an application, including but not limited to a revision to a design specification, after the application has been submitted to the commission, the applicant shall date and initial in ink the revision made to the application.

(d ~~e~~) The date of the revision, as described in (d) above, shall constitute, for purposes of RSA 155-D:4,V, a new receipt date for the application.

(e ~~f~~) For purposes of RSA 155-D:4,V, an application shall not be considered received by the commission until all material required to be submitted has been submitted.

(f ~~g~~) An owner of a building for which plans and specifications have been approved by an architect or engineer pursuant to RSA 155-D:4,VI shall submit to the commission in lieu of an application, the certification required in Puc 1803.04 (b).

Puc 1804.03 Appeals Process.

(a) Any applicant whose application has been initially disapproved by the commission may request an informal reconsideration conference with the director of the electric division ~~consumer affairs~~ at the commission.

(b) The director of the electric division ~~consumer affairs~~ at the commission, or his or her designee, shall hold an informal conference requested pursuant to (a) above, within 10 working days of the request for a conference.

(c) Within 10 working days of the informal conference referred to in (a) above, the director of the electric division ~~consumers affairs~~ shall, pursuant to RSA 541-A:29,II(a):

(1) Issue a written decision which shall:

a. Affirm, reverse or modify the decision on the application; and

b. Summarize the results of the informal conference and the basis for the decision; and

(2) Provide a copy of the written decision, referred to in (c)(1) above, to the applicant.

(d) Any applicant dissatisfied with the decision of the director of the electric division ~~consumer affairs~~ may request in writing, within 10 working days of receipt of the written decision, a formal hearing before the commission, pursuant to Puc 203 ~~2~~ ~~and~~, to review the decision.

PART Puc 1805 EVIDENCE OF COMPLIANCE OF THE COMPLETED BUILDING

Readopt Puc 1805.01, effective 2-2-7 (Document # 8811) to read as follows:

Puc 1805.01 As-Built Construction Certification Required.

(a) Prior to occupancy of a building for which compliance with the energy code is required, certification that the building as constructed complies with the energy code shall be provided as required by this section.

(b) In those municipalities which issue certificates of occupancy, the owner-builder or general contractor shall submit to the appropriate local building official responsible for the issuance of certificates of occupancy, written certification that the building has been constructed as specified in the application and in conformance with the energy code.

(c) In those municipalities which do not issue certificates of occupancy, the owner-builder or general contractor shall submit to the commission and to the owner or buyer of the building written certification that the building has been constructed as specified in the application and in conformance with the energy code.

(d) The individual operating as the owner-builder or general contractor issuing the certification required by (b) and (c) above shall include in the certification the requirements contained in form EC-3, as provided in (e) below.

(e) The owner-builder or general contractor shall include on form EC-3, the certification of energy code compliance, the following:

(1) The name of the owner, builder or general contractor submitting the form;

(2) The name of the company the owner, builder or general contractor is representing;

(3) Identification of the building being certified, including the tax map and lot number, the street address, the municipality and the county wherein the property is located;

(4) The date on which all New Hampshire energy code related components and systems have been installed on the building being certified;

(5) A statement as follows:

"The building being certified meets or exceeds the requirements of the New Hampshire Code for Energy Conservation in New Building Construction and RSA 155-D and complies in all respects with the statements and information supplied on and in connection with the application for certificate of compliance approved by the Public Utilities Commission.";

(6) The signature of the builder or contractor; and

(7) The date of the signature.

Repeal Puc 1806 – 1806.01, effective 2-2-7 (Document # 8811)

~~PART Puc 1806 AMENDMENTS TO ASHRAE 90.1, NON-RESIDENTIAL BUILDINGS~~

~~Puc 1806.01~~ ~~Energy Code for Non-residential Structures~~

~~(a) The text and the requirements of ASHRAE 90.1, which, pursuant to chapter 8 of the MEC, is applicable to non-residential buildings and structures, or portions thereof, and additions to existing non-residential buildings, shall be modified as provided in this part.~~

~~(b) The incorporated ASHRAE 90.1 shall be modified as follows:~~

~~(1) Delete in sec. 1.1 the word "standard" and insert "code";~~

~~(2) Delete in sec. 1.2 the word "standard" and insert "code";~~

~~(3) Delete in sec. 2.1 the word "standard" and insert "code";~~

~~(4) Insert in sec. 2.1 after the word "new" the following: "or altered";~~

~~(5) Delete the word "standard" in sec. 2.1 and insert "code";~~

~~(6) Delete sec. 2.2 and replace it with the following: "This code shall apply to all new buildings and portions thereof and additions to existing buildings that are greater than or equal to 4000 square feet in floor area that provide facilities or shelter for human occupancy.";~~

~~(7) Delete from sec. 2.3 the word "standard" and insert "code";~~

~~(8) Insert in sec. 2.3 (a) after the word "processing" the following: "when the requisite operating conditions for such manufacturing or processing are determined by the local building official or the Public Utilities Commission to be outside the scope of the Code as established in sec. 2.1.";~~

(9) Delete sec. 2.3 (c) and insert the following: "1 and 2 family dwellings greater than 4000 square feet in floor area. However, such dwellings shall comply with the residential/small commercial provisions of the New Hampshire Energy Code.";

(10)Delete from sec. 2.4 the word "standard" and insert "code";

(11)Delete from sec. 3.2 the word "standard" and insert "code";

(12)Insert at the end of sec. 3.4 the definition of "alter" as defined in RSA 155-D:2 and the definition of "change of occupancy" as defined in RSA 155-D:8;

(13)Delete from sec. 3.4 the following words from the definition of check metering: "in addition to the revenue metering furnished by the utility" and insert a period "." after the word control;

(14)Delete from sec. 4.1 the word "standard" and insert "code";

(15)Delete from sec. 4.2 the word "standard" and insert "code";

(16)Delete from sec. 4.3 all references to the word "standard" and insert "code";

(17)Delete from sec. 4.3 all references to the words "may be used" and "should be used" and insert the following: "are appropriate", "are appropriate", and "is appropriate" respectively;

(18)Delete from sec. 4.4.1 the word "standard" and insert "code";

(19)Delete from sec. 5.4.1.2 the word "should" and insert "shall";

(20)Delete from sec. 5.4.2.1 the word "should" and insert "shall";

(21)Delete from sec. 5.4.2.2 the two references to the word "should" and insert "shall";

(22)Delete sec. 5.4.3.1 and insert the following: "Motors expected to operate more than 500 hours per year shall have a minimum acceptable nominal full load motor efficiency no less than the 1992 minimum rated efficiency percent values listed in Table 5-1.";

(23)Delete from sec. 5.4.3.1.1 the word "standard" and insert "code";

(24)Delete from sec. 5.4.3.4 the word "should" and insert "shall";

(25)Delete from sec. 5.4.3.5 the word "should" and insert "shall";

(26)Delete from sec. 6.2.4 the second sentence;

(27)Delete from sec. 6.4.1 the words "will consist" and insert "consists";

(28)Delete from sec. 6.4.2.7 the words "will be" and insert "shall be";

(29)Delete from sec. 6.4.3.2 (b) the word "may" and insert "shall";

(30)Delete from sec. 6.4.3.2 (f) the word "should" and insert "shall";

(31)Delete from sec. 6.4.4.2 the words “may be used” and insert the following: “shall be acceptable for use”;

(32)Delete from sec. 6.5 the words “may be used” and insert the following: “shall be acceptable for use”;

(33)Delete from sec. 6.5.1 the words “may also” and insert the following: “shall be acceptable for the results of the prescriptive ILPA procedure to”;

(34)Delete from sec. 6.5.3.1 the third and fourth sentences and insert the following: “During preliminary evaluations of budget requirements for these buildings, it shall be acceptable to apply the prescriptive procedure. However, for buildings with multiple space activities, the systems performance criteria of 6.6. shall be applied.”;

(35)Delete from sec. 6.5.3.2 the second sentence;

(36)Delete from sec. 6.6.3.1 the word “must” and insert “shall”;

(37)Delete from sec. 6.6.3.2 the second sentence;

(38)Delete from sec. 6.6.4 (c) the second sentence and insert the following: “It shall be acceptable for rooms of identical ceiling height and activities to be evaluated as a group.”;

(39)Delete from sec. 7.3 the second sentence;

(40)Delete from sec. 7.4.2.2 the word “should” and insert “shall”;

(41)Delete from sec. 7.4.3.1 the word “should” and insert “shall”;

(42)Delete from sec. 7.4.3.2 the word “should” and insert “shall”;

(43)Delete from sec. 8.3.1 (b) 1. the following: “tables of alternate component packages” and insert “Table 8A-32”;

(44)Delete sec. 8.3.3 and insert the following: “Climate data for determining criteria or compliance values for New Hampshire are contained in Tables 8A-0 and 8A-39.”;

(45)Delete from the first sentence in sec. 8.3.4 the word “standard” and insert “code” and delete from the last sentence the word “should” and insert “shall”;

(46)Delete from sec. 8.3.5 the word “should” and insert “shall”;

(47)Delete from sec. 8.4.5.1 (f) the word “should” and insert “shall”;

(48)Delete from sec. 8.4.5.3 the word “should” and insert “shall”;

(49)Delete “sec. 8.4.7” and “Table 8-2”;

(50)Delete from the first sentence in sec. 8.5.3 the following: “Each Alternate Component Package (ACP)” and insert “Alternate Component Package (ACP) Table 8A-32”;

(51) Delete from sec. 8.5.3 the following from the third paragraph: “The ACP in Attachment 8A provide” and insert: “Table 8A-32 provides”;

(52)Delete “sec. 8.5.3 (b)”;

(53)Delete the third sentence in sec. 8.5.3 Note and insert the following: “The base case in Table 8A-32 has 3 fenestration U-value ranges.”;

(54)Delete from sec. 8.5.4 (b) the following: “the selected ACP Table” and insert: “Table 8A-32”;

(55)Delete from sec. 8.5.4 (c) the following: “the ACP Table” and insert: “Table 8A-32”;

(56)Delete from sec. 8.5.4 (d) the following: “the ACP Table” and insert “Table 8A-32” and delete the last sentence from sec. 8.5.4 (d);

(57)Delete from sec. 8.5.4 (e) the following: “the ACP Table” and insert: “Table 8A-32” and delete the last sentence from sec. 8.5.4 (e);

(58)Delete from sec. 8.5.5 the following: “each of 38 climate ranges contained in Tables 8A-1 through A-38 in Attachment A” and insert the following: “New Hampshire are contained in Table 8A-32” and insert the following sentence at the end of this section: “For information purposes only the climate date used to develop Table 8A-32 are shown on the line labeled 8A-32 in Table 8A-39.”;

(59)Delete sec. 8.5.5.1;

(60)Delete from sec. 8.5.5.2 the following: “the appropriate ACP Table as determined in 8.5.5.1” and insert: “Table 8A-32”;

(61)Delete from sec. 8.5.5.2 (a) Equipment Power Density 2. the following: “Tables 8A-1 through 8A-38” and insert: “Table 8A-32”;

(62)Delete from sec. 8.5.5.2 (a) Occupant Load Adjustment 1. the word “tables” and insert “table”;

(63)Delete from sec. 8.5.5.2 (b) the following: “ACP Table” and insert “Table 8A-32”;

(64)Delete from sec. 8.5.5.2 (d) 2. the word “must” and insert: “shall”;

(65)Delete from sec. 8.5.5.2 (e) the following: “(see ACP Tables in Attachment 8A)”, “Each ACP Table” and “(See ACP Tables in Attachment 8A for requirements)” and insert: “(see Table 8A-32)”, “Table 8A-32” and “(see Table 8A-32 for requirements)” respectively;

(66)Delete from sec. 8.5.5.3 the words “the appropriate ACP Table” and insert the following: “Table 8A-32”;

(67)Delete from sec. 8.5.5.4 the words “each ACP Table” and insert “Table 8A-32”;

(68)Delete from sec. 8.6.1 the word “standard” and insert “code”;

~~(69)Delete from sec. 8.6.5 the following sentence: "For climate locations with HDD65 greater than 15,000, see 8.4.6, Table 8-2.";~~

~~(70)Delete the last sentence from sec. 8.6.6 (b);~~

~~(71)Delete the last sentence from sec. 8.6.7;~~

~~(72)Delete from sec. 8.6.9 the word "will" and insert "do";~~

~~(73)Delete from sec. 8.6.10.2 (b) the word "should" and insert "shall" and delete the words "all locations with more than 3000 HDD65" and insert the following: "New Hampshire";~~

~~(74)Delete from Attachment 8A the following: "ACP Tables 8A-1 through 8A-31" and "Tables 8A-33 through 8A-38";~~

~~(75)Delete from Table 8A-0 the following lines labeled: "ACP Table Number 8A-1 through 8A-31" and "8A-33 through 8A-38";~~

~~(76)Delete from Table 8A-39 the following lines labeled: "ACP Table No. 8A-1 through 8A-31" and "8A-33 through 8A-38";~~

~~(77)Delete from sec. 9.4.2.2 the word "should" and insert "shall";~~

~~(78)Insert the following sentence at the end of the first sentence in sec. 9.4.4.2: "Dampers shall be an acceptable means to prevent equipment damage due to freezing or to provide proper warm-up control." And delete the "Note" at the end of this section;~~

~~(79)Delete from sec. 9.4.4.2 Exceptions: "(a)" and "(b)";~~

~~(80)Delete from sec. 9.4.6.2 the word "should" and insert "shall";~~

~~(81)Delete from sec. 9.4.8.1 the word "should" and insert "shall";~~

~~(82)Delete from sec. 9.4.9 the word "should" and insert "shall";~~

~~(83)Delete from sec. 9.5.3.1 Exceptions (a) the word "should" and insert "shall";~~

~~(84)Delete from sec. 9.5.3.1 Exceptions (c) the "Note";~~

~~(85)Delete from sec. 9.5.3.1 Exception "(d)";~~

~~(86)Delete sec. 9.5.3.2;~~

~~(87)Delete from sec. 9.5.5.2 the word "should" and insert "shall";~~

~~(88)Delete from sec. 10.3 the word "standard" and insert "code";~~

~~(89)Delete from sec. 10.4.2.3 the word "should" and insert "shall";~~

~~(90)Delete from sec. 10.4.3.1.2 the 2 references to the word "should" and insert "shall";~~

(91)Delete from sec. 10.4.3.2 the word “should” and insert “shall”;

(92)In Tables 10-1, 10-2, 10-3, 10-4a, 10-5, 10-6, 10-7, 10-8, 10-9, and 10-10 the values listed under the column titled “Jan.1, 1992” shall apply;

(93)In Table 10-4b the values listed under the column titled “Minimum Performance Beginning Jan. 1, 1990” shall apply;

(94)In Table 11-1 the values listed under the column titled “1992 Eff and Loss” shall apply;

(95)Delete from sec. 11.3 the word “standard” and insert “code”;

(96)Delete from sec. 11.4.2 Exception the following: “R-6.5 (R-12.5 as of January 1, 1992)” and insert “R-12.5”;

(97)Delete from sec. 11.4.5.1 the 2 references to the word “should” and insert “shall”;

(98)Delete from sec. 11.4.5.3 the word “should” and insert “shall” and delete the word “will” and insert “is determined to”;

(99)Delete from sec. 11.5.4 the words “may only be used” and insert “is acceptable for use only”;

(100)Delete from sec. 11.5.6.1 the word “should” and insert “shall”;

(101)Delete from sec. 11.5.6.2 the word “should” and insert “shall”;

(102)Delete from sec. 11.5.6.3 the word “should” and insert “shall”;

(103)Delete from sec. 12.4.1.2 Exception the reference to “5000 ft2” and insert “4000 ft2”;

(104)Delete from sec. 12.4.2.1 the word “should” and insert “shall”;

(105)Delete from sec. 12.4.2.2 the word “should” and insert “shall”;

(106)Delete from sec. 13 the word “standard” and insert “code”;

(107)Delete from sec. 13.1 the word “standard” and insert “code”;

(108)Delete from sec. 13.3 the third sentence in the second paragraph and insert: “In order to adequately compare design options the objective shall be to minimize life cycle costs including capital costs and operation and maintenance costs along with energy costs over the projected lifetime of the building.”;

(109)Delete from sec. 13.7 the second and third paragraphs and insert the following: “Prescribed assumptions shall be used without variation. “Default” assumptions shall be used unless the designer can demonstrate to the local building official or the Public Utilities Commission that a different assumption better characterizes the building’s use over its expected life. Any modification of a default assumption shall be used in modeling both the prototype or reference building and the proposed design unless the designer demonstrates to the local building official or the Public Utilities Commission a specific cause to do otherwise. Special

~~procedures necessary for speculative buildings are discussed in 13.7.7. Shell buildings shall not use Section 13.";~~

~~(110)Delete from sec. 13.7.2.3 the word "should" and insert "shall";~~

~~(111)Delete from 13.7.3.1 the words "the alternate component tables (ACP) in Attachment 8A" and "this ACP" and insert "Table 8A-32" in both instances;~~

~~(112)Delete from sec. 13.7.4.2 the word "should" and insert "shall";~~

~~(113)Delete from Table 13-6 note (2) the first sentence and insert: "It shall be acceptable to use constant volume in zones where pressurization relationships must be maintained by code.";~~

~~(114)Delete from Table 13-6 note (4) and insert: "If a warehouse is not intended to be mechanically cooled, it shall be acceptable to calculate both the ECB and DECOS assuming no mechanical cooling.";~~

~~(115)Delete from sec. 13.7.6.2 the last sentence and insert: "When calculating the DECOS, it shall be acceptable to use lesser deadband ranges";~~

~~(116)Delete from sec. 13.7.7.1 the second sentence of the first paragraph and insert: "It shall be acceptable to base the DECOS on an assumed adjusted lighting power for future lighting improvements";~~

~~(117)Delete from sec. 13.7.7.1 the following words from the second paragraph: "must", "may" and "must" and insert the word "shall" in all 3 instances;~~

~~(118)Delete from sec. 13.7.7.2 the word "may" and insert "shall";~~

~~(119)Delete from sec. 13.8 all references to the word "should" and insert "shall"; and~~

~~(120)Delete from Attachment 13A the three references to the words "may" and "must" and insert "shall" in all 3 instances.~~